

Talent Recruitment Management System for Small and Micro Enterprises Based on Springboot Framework

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Abstract: Talent recruitment management is an important management activity of small and micro enterprises. However, small and micro enterprises often face the problems of high recruitment cost and difficult background investigation of job seekers. The talent recruitment management system of small and micro enterprises based on springboot framework can effectively solve the above problems. Practice has proved that the B / S architecture in the web browser application development, the system interface is easy to operate, strong scalability. Firstly, this paper introduces the analysis and design method of the system; Secondly, it describes in detail the two important function points of recruitment process and back key scoring; Finally, through the recruitment process, it clearly shows a talent recruitment management system for small and micro enterprises, which takes into account both back information and cost.

1. Introduction

In recent years, the flow of talents in private enterprises is accelerating, which leads to the increasing cost of recruitment. Especially in small and micro enterprises, single recruitment channel and normalization of employee turnover seem to be difficult problems for small and micro enterprises to solve. Low level of human resource management has become an important factor restricting the development of small and micro enterprises. According to the survey results of 100 job fairs in random cities in 2019, about 75% of job seekers are unwilling to work in small and micro enterprises [1]. In view of the above problems, this study aims to establish a talent recruitment management system suitable for small and micro enterprises. The system can solve the problems of difficult background investigation, high recruitment cost and not in-depth in the recruitment of small and micro enterprises, and help enterprises avoid employment risks.

2. Development Basis

2.1. Springmvc and Springboot Framework (Back end Framework)

Spring MVC provides POJO development mode and adopts MVC architecture idea, which makes the development and testing of controller easier. The framework is mainly composed of model, controller and view, which can realize the decoupling between business data and view.

Springboot is a new framework provided by pivot team, which is designed to simplify the initial construction and development process of new spring applications. The framework officially recommends using YML file for configuration, so that developers no longer need to define the template configuration. And springboot follows the principle of "Convention is better than configuration" [2]. Compared with the traditional spring framework, developers can directly use the default configuration in most cases, and modify a small amount of personalized configuration according to their own needs to start the logic code writing work.

2.2. React Framework (Front end Framework)

In the current situation of front-end and back-end parallel development, front-end and back-end separation [3] has become the industry standard of Web project development, and effective decoupling can be achieved through nginx reverse proxy. In front-end technology, react framework has been widely used because of its high scalability.

The system architecture of this system adopts the standard four layer architecture (Dao layer, controller layer, service layer, view layer) [4], in which Dao layer is the data access layer, responsible for database access and operation, and mybatis is used as the persistence layer to operate MySQL database. The service layer is responsible for processing business logic. Controller is responsible for data interaction with front-end pages through JSON format data. The back end of the system is developed with springboot and spring MVC framework, and the front end is developed with react.

3. System Analysis and Design

3.1. System Design Idea

The purpose of talent recruitment management system for small and micro enterprises is to help small and micro enterprises to complete staff recruitment and background investigation at low cost. According to the requirements of the talent recruitment management system, there are four user roles in the platform, namely job seeker, enterprise, HR and administrator.

The basic functions are enterprise on-the-job personnel management, job seekers sending resumes to the desired enterprises and checking the interview progress at any time, system HR screening resumes, system HR interviewing job seekers, and job seekers' background investigation, etc. Among them, the system HR interview job seekers and job seekers background survey is the key and innovation of the system. This system can help enterprises reduce the cost of interview by providing professional HR to interview job seekers; the background survey of job seekers is a series of detailed scoring links set during HR interview and when the enterprise dismisses the employee. Just based on these detailed scoring, the system will calculate the total score of the talent according to the talent evaluation index system of competency model [5]. (As shown in Figure 1.)

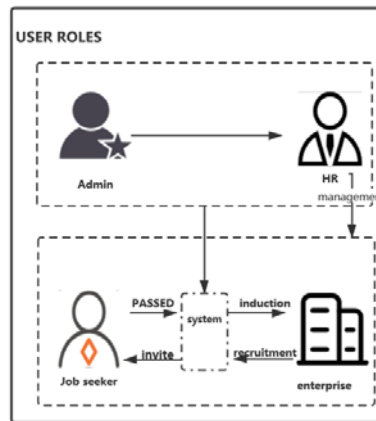


Figure 1: User roles

3.2. System Function Design

The system is divided into five functional modules: login, job seeker, HR, enterprise and administrator, as shown in the figure 2.

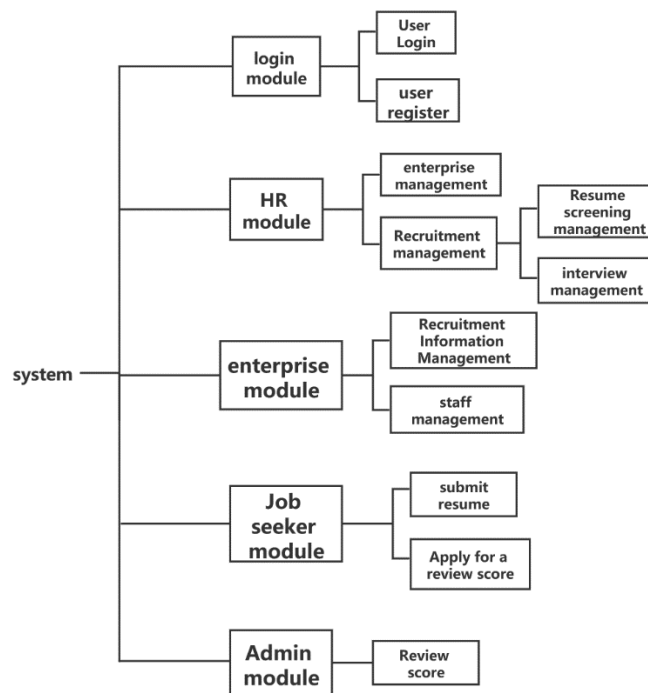


Figure 2: Function module

(1) The login module is responsible for the login of four types of users, including job seekers, enterprises, HR and administrators, using accounts and passwords, as well as the registration of job seekers, enterprises and HR.

(2) HR module is responsible for the screening of enterprise registration information, the preliminary screening of job seekers' resumes, and the overall arrangement of job seekers' offline interviews.

(3) Enterprise module, can manage employees, publish recruitment information, select talents from the enterprise talent reserve queue.

(4) In the job seeker module, you can view the recruitment information released by all enterprises in the system, and send your resume according to your preference. You can also view your own background survey results and comprehensive score. If you have any objection to the score, you can apply for review.

(5) Administrator module, according to the review application of job seekers, reviews the score online or offline.

3.3. System Architecture Design

The system uses B / S architecture design, as shown in the figure 3, in this architecture, the first layer is the web browser, the user interface is realized through the web browser. The second layer is the web server, which completes the system logic, realizes the specific functions, accepts the user's requests and transmits them to the server [6]. The third layer is the database server, which provides data services, operates data, and then returns the results to the web server, and the results are displayed on the system interface. That is, users only need a browser to access the system.

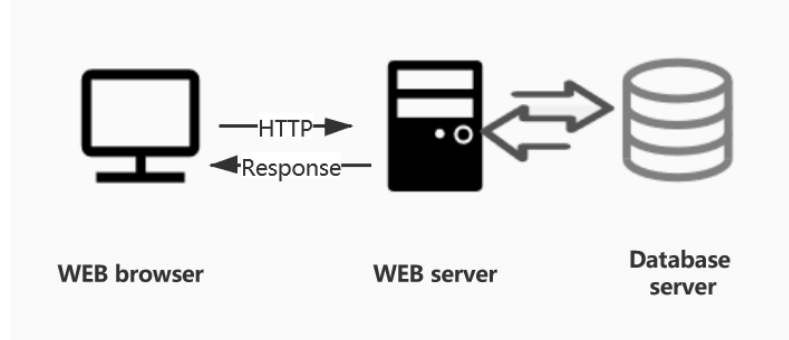


Figure 3: B / S architecture

4. The Development and Realization of System

After the project is developed, it will be deployed to Alibaba cloud server. On the basis of meeting the needs of users, the interface is beautiful and easy to operate. There are many interfaces in the design of the system. Due to the space, the implementation details of the system are introduced in detail by taking the recruitment process and back transfer scoring as examples.

4.1. View Recruitment Positions

Job seekers can view the recruitment information released by all enterprises in the system, and send resumes according to their own intentions (as shown in Figure 4).

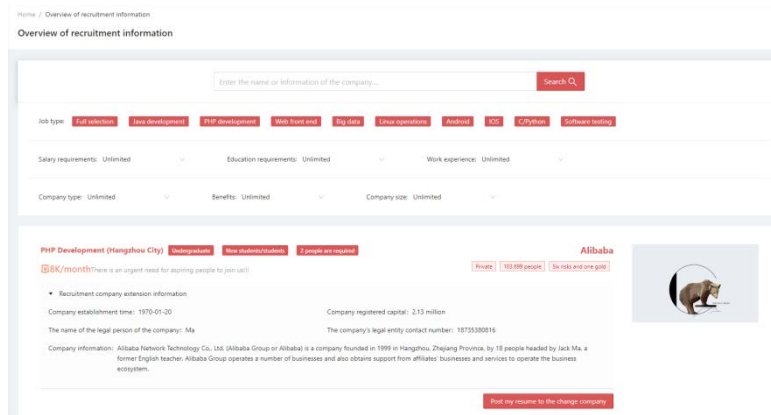


Figure 4: Recruitment position

4.2. Interview Progress

Job seekers can check the progress of resume delivery at any time after the completion of resume delivery, check the arrangement of offline interview, and apply for a change of time when time conflicts (as shown in Figure 5).

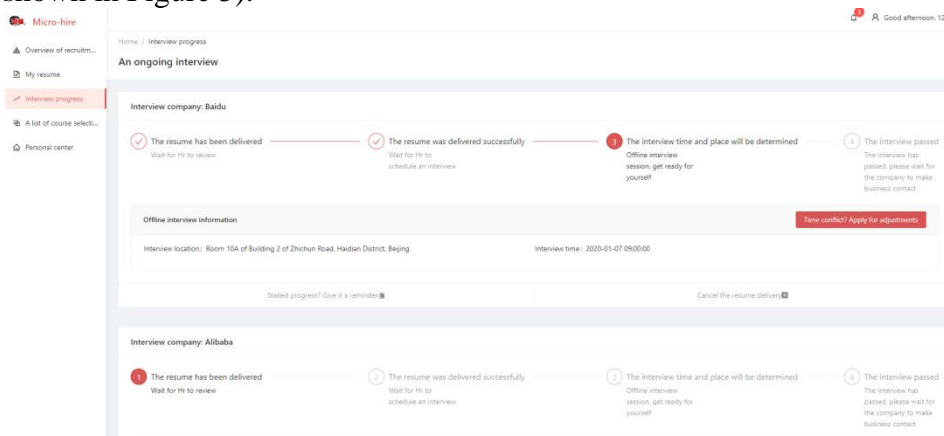


Figure 5: Interview progress

4.3. Recruitment Process and Back Transfer Scoring

After a job seeker delivers a resume, HR of the system will screen the resume of the job seeker and score it. If the resume meets the requirements, HR of the system will arrange offline interview for the candidate, and the interview will take effect after receiving the confirmation information from the candidate. Hr of the system will also score the performance of the candidate in the offline interview, which will be entered into the candidate's back tone information. If the interview is passed, the system will inform the candidate online and put the candidate into the talent reserve queue of the enterprise. Enterprises can invite talents from the reserve queue according to their own needs. Figure 6 shows the detailed flow chart of recruitment.

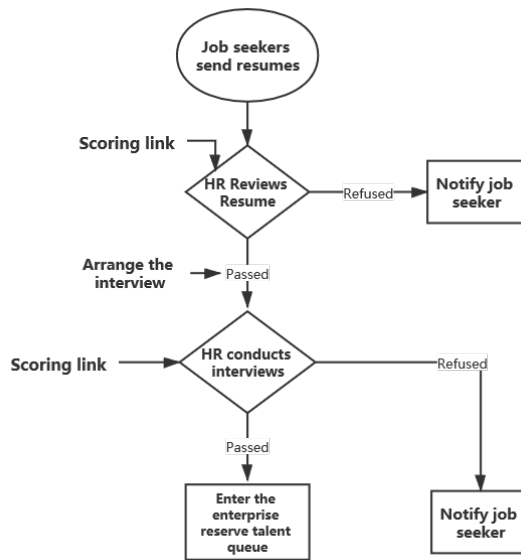


Figure 6: Detailed recruitment flow chart

In addition to the two points in the recruitment process, there are also the detailed scoring of the employee when the employee leaves. The scoring of the above three stages together constitute the back transfer scoring process of the talent, and the information display is transparent and intuitive. Figure 7 shows the detailed background information of talents.



Figure 7: Detailed background information

5. Conclusion

This paper uses springboot framework and MySQL database to design a talent recruitment management system for small and micro enterprises. Users can access the system without client. Through the consideration of the current recruitment situation of small and micro enterprises, recruitment process suggestions and talent evaluation scientific index planning, combined with the project feasibility [7] and the interaction between customers and the system, the design and implementation of the system are completed, which can provide a reference method for the recruitment problems of small and micro enterprises.

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